

1 September 2017

Economic Regulation Authority
Level 4, Albert Facey House
469 Wellington Street, PERTH WA 6000

Via email to publicsubmissions@erawa.com.au

DISCUSSION PAPER: 2016/17 WHOLESALE ELECTRICITY MARKET REPORT TO THE MINISTER FOR ENERGY

Wesfarmers Kleenheat Gas (Kleenheat) welcomes the opportunity to comment on the Economic Regulation Authority's (ERA) 2016/17 Wholesale Electricity Market (WEM) Report to the Minister for Energy (2016/17 Report). Kleenheat views the reform of the Western Australian electricity market, encompassing both the wholesale and retail markets and network operations, as vital to delivering greater value of consumers. With this stipulation, Kleenheat's believes that:

1. Reform of the WA electricity market should be undertaken in a holistic and coordinated manner

Kleenheat recommends that electricity reform in the WEM must be undertaken in a coordinated manner that reflects the highly interconnected nature of the structure, design and regulatory framework of the market. This necessitates that network reform, wholesale market reform and retail market reform are undertaken as a combined program and not as piecemeal individual reform initiatives. While the purpose of this review is focused on the Wholesale Electricity Market, the success of any wholesale reform by their nature is also dependant on applicable reforms to be undertaken in conjunction to the network and retail sectors.

2. The successful implementation of a constrained network access model is the most important immediate reform for the WEM

The implementation of a constrained network access model was announced by the Minister for Energy at the WA Energy Conference on the 23rd of August 2017. The current unconstrained network access model has been a barrier to investment in the market and the implementation of a constrained network access model is a critical step in addressing that barrier to investment. However, the successful implementation of a constrained network access model will necessitate the development and implementation of a security constrained network dispatch engine to ensure a location constraints can be managed efficiently. The existing manual processes and outdated systems that currently operate the wholesale electricity market are not adequate in the context of adopting a constrained network access model. The adoption of a constrained network access model requires two fundamental precursors for its successful implementation and operation.

- Firstly, reforms to the WEM Rules to adopt facility bidding, later gate closure and shorter dispatch cycles are critical to enable the operational requirements of a constrained network access model once it is instituted.

- Secondly and coincidentally, AEMO must be provided a clear mandate and associated funding approval from the ERA so AEMO can design, develop, test and implement the necessary security constrained network dispatch engine.

Reforms will also be needed to enable the more effective specification of the ancillary services requirements of the market and the management of these requirements. Kleenheat is concerned if these complementary reforms and system developments are not pursued as part of an overall package of network access reforms, the reforms will fail.

3. Achieving wider efficiency and competitiveness of the market requires structural reform to reduce the dominance of Synergy in the market.

As a transitional arrangement, Kleenheat believes that the Standard Products regime must be reformed to address the current failing of the design that places the process of price determination in the hands of Synergy, which is a perverse circumstance, given the natural incentives for Synergy to restrict access to wholesale supply by charging higher prices. Kleenheat supports the complementary process of the ERA's review of the EGRC regulations to which Kleenheat has made a submission and believes that many alternative superior frameworks to the current Standard Product regime exist. Kleenheat notes that the pricing of the Standard Products has recently become more competitive but still believes the regime is inferior to alternatives that would be expected to result in an improved balance of commercial interests between the contracting parties.

Kleenheat views the mechanisms established by the Commission for Energy Regulation in Ireland to address wholesale market concentration as a positive example of the action taken by a regulatory authority to promote greater competition. These included the development of a Directed Contracts regime targeted at increasing independent retailer's access to appropriately priced wholesale electricity supply. An internal Kleenheat report summarising the measures implemented by the Commission for Energy Regulation is attached in Appendix A. Another alternative to reform the Standard Products is to conduct a Dutch auction as referred to in Kleenheat's submissions to the ERA's review of the EGRC regulations earlier this year.

Reforms to the Standard Products regime are a necessary but insufficient reform. It is important that the Government commit to structural reform of Synergy that could entail, as one of the possibilities, creating competing 'gentailers' with unbalanced portfolios that will encourage dynamic trading between these newly created entities and other market participants.

4. Coincidental to these structural reforms, it is critical that the Government adopt full retail contestability (FRC)

Full retail contestability, as a means to encourage private sector investment, is vital to the reform of the WA electricity market. FRC will provide a competitive means that the investment requirements of the market can be monetised through competitive access to customers. As it currently stands, over 98 per cent of customers in the South West Interconnected System are unable to choose their electricity retailer.

As an interim step, Kleenheat supports the reduction of the electricity contestability threshold to 20 MWh per year to expand the number of customers that have the right to choose their electricity retailer. This interim reform will increase the number of customers able to choose their electricity retailer from the current 16,000 customers to around 40,000 customers. This reform will capture a greater proportion of small business customers in the WEM.

5. The present WEM Rules to address the misuse of market power are archaic, inefficient and ambiguous.

These stipulations are a second best response that would be much more effective if the reforms outlined above were implemented. Kleenheat encourages the ERA to investigate the implications of the amendment to the *Competition and Consumer Act 2010* to introduce an 'effects test' to the assessment of the potential misuse of market power. It is important that the WEM Rules incorporate best practice regulation of the misuse of market power and those amendments to these rules are consistent with the broader legal framework that prevails.

The amendment of Section 46 of the *Competition and Consumer Act 2010* prohibits a corporation, which has a substantial degree of power in a market from taking advantage of that power for three prescribed anti-competitive purposes:

- eliminating or substantially damaging a competitor;
- preventing entry into a market; or
- deterring or preventing engagement in competitive conduct in a market.

Kleenheat believes that where Synergy has been directed to cease to operate a generation project, it should relinquish the network transfer capability associated with these projects.

Kleenheat believes that the ancillary service provisions of the WEM Rules and the Technical Rules must be reviewed to ensure that they do not represent a barrier to the potential for battery storage to serve as a source of ancillary services to the market

The recent Electricity Market Review (EMR) has highlighted the impact of the dominance of Synergy on the operation of the current market and its impact upon other Market Participants in the WEM. Kleenheat believes that addressing the significant issue of market dominance is the foundation for any more significant reform recommended by the ERA in its WEM Report.

Kleenheat supports the ERA's 2016/17 Report and agrees with recommendations presented, with a view to create meaningful change in a market in need of reform. Kleenheat is of the view that a market can only operate efficiently when effective competition exists in the area of both the wholesale and retail market. The current circumstance is that neither the wholesale or retail market is effectively competitive due largely to the concentration of the wholesale market and the absence of full retail contestability. The limited competition in the WEM due to Synergy's dominance as per Question 3¹ of the Report should be prioritised by the ERA for review and recommendation to the Minister. Synergy's dominance and the lack of clarity regarding its future investments in new generation capacity compounds the absence of full retail contestability to dissuade private sector investment in the WEM.

Kleenheat believes it will continue to face challenges securing competitively priced wholesale electricity until such time that Synergy's market dominance is addressed, and as such, wholeheartedly supports the recommendations to prioritise review and recommendation on mitigating Synergy's market dominance.

¹ Question 3 was "Should some of the reforms identified [in section 2.1.1 of the Report] be prioritised?"

If you require additional information or would like to discuss this further, please contact Simon Middleton, Manager Electricity on 9312 9619.

Yours sincerely

MARK GADSBY

GENERAL MANAGER, KLEENHEAT

APPENDIX A – EFFECTIVE COMPETITION IN THE IRELAND ELECTRICITY INDUSTRY

Executive summary

Kleenheat’s review of the Ireland retail electricity market deregulation process undertaken by the Commission for Energy Regulation (“the Energy Regulator”) since 1999 has shown that:

- Positive and proactive steps have been taken to reduce the barriers to entry and expansion and promote effective competition in the electricity market, albeit the market is still highly concentrated;
- Competition has delivered value to energy consumers with electricity and gas price discounts, greater choice of value add services and more flexible payment options; and
- The adverse impact of deregulation on the financial performance of the incumbent electricity retailer (Electric Ireland) has been temporary despite a significant decrease in market share. The change in the external market incentivised Electric Ireland to refocus on customer value and restructure its business for greater efficiency and profitability. There was also very little impact on the generation and wholesale arm.

There are lessons to be learned from the proactive approach to competition taken by the Energy Regulator when introducing full retail contestability (“FRC”). Steps applicable to reducing the barriers to effective competition in the WA electricity market include:

- Maintaining the gas moratorium and regulating Synergy’s retail market offer until the following criteria for effective competition are satisfied:
 - At least four independent electricity retailers operate in the market;
 - Aggregate independent retailer market share is at least 50 per cent;
 - The third largest retailer’s market share is at least 10 per cent;
 - The rolling 12 month average churn rate is greater than 15 per cent;
- Expanding the Standard Products Arrangements to:
 - Increase the number of product options available (bilateral products, derivatives, peak / off-peak, etc.);
 - Increase the volume of products offered; and
 - Ensure products are competitive priced by introducing a Dutch auction process.
- Making Synergy customer data available to all market participants via the market operator (de-identified if necessary);
- Encouraging impartial product comparison websites to be established to inform consumers and facilitate a simple switching process;
- Establishing market systems which support customer switching via processes which are simple and easy to navigate; and
- Ensuring fair and neutral access to enabling services, such as transmission and distribution services.

Kleenheat believes that introducing such measures will both deliver value for customers in the SWIS similar to those achieved in Ireland, while driving greater efficiency in Synergy’s retail business and

reducing its reliability on the Tariff Equalisation Contribution, which has cost the WA government almost \$1.6 billion over the past 5 years.

Introduction

The WA Government is considering the implementation of FRC in WA. Kleenheat believes that competition provides consumers with better outcomes by incentivising businesses to focus on meeting customer needs in the most efficient fashion. This is particularly true for commoditised market, such as electricity, where retailers must offer low cost, reliable supply and provide value added services to meet customer needs. Kleenheat has shown its commitment to competition in the WA retail natural gas market, accumulating 20 per cent market share and saving residential customers \$15 million in natural gas charges since entering the market in 2013.

Introducing effective competition into a market with a dominant incumbent supplier (such as Synergy in the WA electricity market) is difficult as the incumbent can use its market strength to stifle the growth of new entrants. Dominant incumbent suppliers have several competitive advantages which can be exploited to protect market position. These include:

- Access to legacy, low cost wholesale supply, often whose sunk costs have been written off, particularly in cases where the incumbent is vertically integrated (such as Synergy);
- A portfolio of legacy enabling services (such as network access);
- The ability to offer and cross-subsidise dual fuel products because of their unique access to customer data and insight due to their incumbency in a franchise;
- Superior ability to underwrite transactions due to an implicit government guarantee, such is the case for Synergy; and
- Strong brand recognition, with brands often being synonymous with the products and services offered.

Furthermore, new market entrants can face substantial entry and expansion costs in new markets, such as costs to establish billing and IT systems, regulatory compliance systems and licencing costs. These costs act to protect dominant incumbents from effective competition.

The WA electricity market has been contestable for customers using above 50MWh since 2005. To 30 June 2016, retailers other than Synergy have obtained a combined market share of 33 per cent of that contestable market (of which Alinta's market share is 25 per cent). Furthermore, Synergy's market share increased by five per cent in FY16.

If the WA Government wishes to establish effective competition in the WA retail electricity market, steps should be taken to mitigate Synergy's market power, such that new energy retailers can enter and expand in the market. Kleenheat has reviewed several global examples of electricity market deregulation and believes that the WA Government should implement similar measures to those used by the Energy Regulator in Ireland when deregulating its electricity retail market in the early 2000's.

Ireland has many similarities to the Western Australian electricity market. These similarities include the structure of the retail market and that both markets have a reserve capacity mechanism. Ireland, prior to the reform program implementation, had a highly concentrated energy market which makes it a useful reference case for highlighting the reform considerations that Western Australian market should be cognisant of.

Background on the Ireland electricity market deregulation

The process of deregulation of the retail electricity market in Ireland commenced in 1999, with the establishment of the Energy Regulator via the Electricity Regulation Act. At the time, the Energy Regulator's roles was to license and regulate the generation and supply of electricity, authorise the construction of new generating plant and oversee third party access to Electricity Supply Board's ("ESB's") transmission and distribution systems. A key part of the Energy Regulator's remit was the restructuring of the wholesale and retail electricity markets and opening of the retail market to competition.

In its first annual report, the Energy Regulator stated that the aim of introducing competition was to improve service quality and efficiency and drive cost reductions for consumers. The Energy Regulator noted that tough regulation was required to protect consumer interests, but that it should also be fair, to market participants' commercial interests and the interests of their shareholders, and balanced, to ensure that unfair advantage was not given to one participant over another.

Prior to the establishment of the Energy Regulator, the ESB was the monopoly electricity supplier in the Republic of Ireland. The ESB was established by statute in 1927 and is majority owned by the Irish Government¹. The ESBs operating activities included electricity generation, transmission and distribution and retail. For calendar year 2000, ESB earned a profit after tax of €39 million on revenue of €1,894 million, and held assets of €5,074 million as at 31 December 2000.

While the ownership and vertical integration of the ESB was maintained following the creation of the Energy Regulator, the Energy Regulator mandated the functional and accounting separation of the ESBs generation, transmission, distribution and retail function and established frameworks to ensure appropriate transfer pricing and third party access arrangements were implemented.

ESB Customer Supply ("ESB CS") was the retail arm of the ESB and was later rebranded to Electric Ireland.

The Energy Regulator implemented progressive deregulation of the electricity retail market. The Commercial and Industrial ("C&I") customer segment was the first segment to be opened to competition in 2000. Small and Medium Enterprise ("SME") and Residential customer segments were opened to competition in 2005.

Dealing with the barriers to competition

To support the entry and expansion of new suppliers in the electricity retail market, the Energy Regulator established a number of measures targeted at addressing the barriers to competition in the market. These measures are summarised in the following table.

¹ The Minister for Finance and the Minister for Communications, Energy and Natural Resources hold 85 per cent and ten per cent respectively of ESB's issued share capital. The remaining five per cent of the issued share capital is held by an Employee Share Ownership Trust.

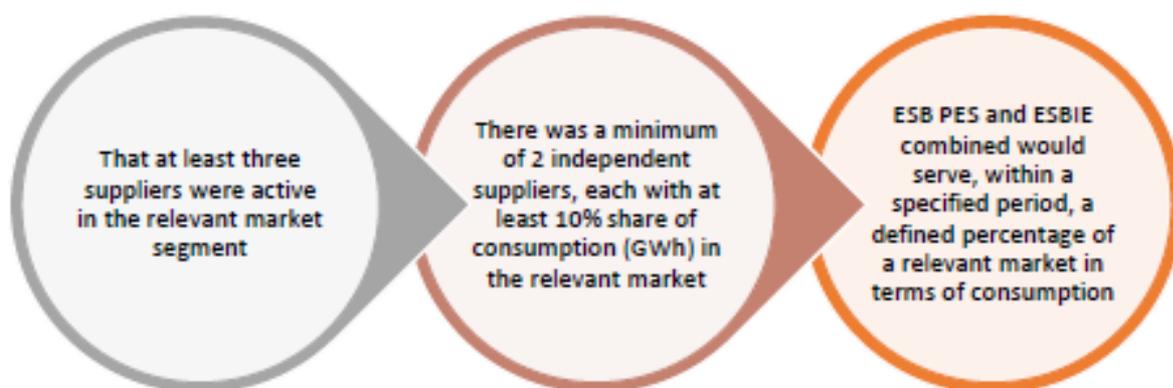
<i>Barrier to competition</i>	<i>Relevance in Ireland market</i>	<i>Energy Regulator actions to mitigate barrier</i>
Access to enabling services	ESB was a vertically integrated supplier which controlled (and still controls) the electricity transmission and distribution networks.	<p>The Energy Regulator required ESB to be restructured to establish management, legal and accounting separation of the generation, transmission, distribution and retail functions of the business.</p> <p>The Energy Regulator established third party access frameworks to prevent any party gaining unfair access to transmission and distribution services.</p>
Access to wholesale supply	ESB was a vertically integrated supplier which controlled a substantial portion of the generating assets in the wholesale market.	The Energy Regulator established new bidding procedures, Directed Contracts (discussed below), ring-fencing and other measures to improve wholesale market liquidity.
Incumbent brand position	ESB was the monopoly electricity supplier for more than 70 years and its brand was synonymous with electricity in Ireland.	Energy Regulator required ESB to rebrand ESB CS. ESB CS was rebranded to Electric Ireland in 2010.
Incumbent financial resources	ESB has substantial financial resources to support its business in the event of a prolonged price competition.	Energy Regulator retained its authority to regulate ESB CS prices until effective competition was established in the various market segments (discussed below).
Dual fuel bundling	The ability to offer dual fuel (electricity and gas) bundling and cross subsidise the products provides incumbents an unfair advantage over single product suppliers.	Energy Regulator restricted ESB CS from entering the retail gas market until effective competition was established in the various market segments.

<p>New entrant costs</p>	<p>New entrant costs included capital expenditure to establish IT and billings systems, market operation systems and licencing and regulatory compliance functions.</p>	<p>In establishing new market systems and frameworks, Energy Regulator sought to streamline licencing and regulatory requirements and staged reporting requirements with smaller suppliers having reduced reporting burdens.</p>
<p>Market knowledge and customer data</p>	<p>ESB was the monopoly electricity supplier for more than 70 years and its market knowledge and customer data was substantial.</p>	<p>No specific actions were taken by the Energy Regulator to mitigate this advantage.</p>

Effective competition criteria for full price deregulation

The Energy Regulator established the following criteria to assess the effectiveness of competition in the retail electricity market. Each of the SME and residential market segments was assessed separately. Once all of these criteria were met, retail price regulations placed on ESB CS were removed, making electricity prices in that segment fully deregulated, and ESB CS was rebranded to Electric Ireland.

Criteria for price deregulation



Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017.
 Note: ESB PES and ESBIE were collectively ESB CS.

The market share (by consumption) thresholds for ESB CS were set at 50 per cent for the SME segment and 60 per cent for the residential segment. These thresholds were met and prices were fully deregulated in the SME and residential segments in October 2010 and April 2011 respectively.

Directed Contracts

To address ESBs dominant position in the wholesale generation market, the Energy Regulator introduced a number of measures to support spot and futures market liquidity. These included establishing Directed Contracts. Directed Contracts are regulated Contracts for Difference (“CfDs”) imposed on generators deemed to have market power (primarily ESB Generation & Wholesale (“ESB GW”)). These contracts place a requirement on generators to hedge² specified volumes of wholesale electricity based on a predetermined pricing mechanism.

The volume of electricity granted under the Directed Contracts is determined by the Energy Regulator. The exact methodology for determining the volume of Directed Contracts is unclear, however the aim of these contracts appears to be to create pseudo-generators and reduce the Herfindahl-Hirschman Index³ (“HHI”) for the generation market to 1,150, being moderate concentrated to un-concentrated.

The Energy Regulator determines the maximum volume of each type of Directed Contract to which each electricity retailer (including Electric Ireland) can subscribe. The Directed Contract types are:

- **Baseload** – 100 per cent contract volume for all trading intervals;
- **Mid-merit** – 100 per cent contract volume for trading intervals between 7am to 11pm on business days and 80 per cent thereof for the same intervals on non-business days; and
- **Peaking** – 100 per cent contract volume for trading intervals between 5pm to 11pm on all days between October and March.

The Energy Regulator runs a subscription process on a quarterly basis whereby it determines the maximum Directed Contract volumes for each electricity retailer for the coming four quarters (25 per cent in each quarter). Retailers then choose whether they wish to subscribe to their maximum contract volume for the future quarters, or a portion of the volume. The outcome of this process is that the volume of Directed Contracts a retailer has in any quarter will be the aggregate of their contract subscriptions over the past four Directed Contract auctions.

The strike prices for Directed Contract are determined by the Energy Regulator by using a regression formula for each type of Directed Contract (baseload, mid-merit and peaking) as a function of the forward fuel and carbon prices⁴.

The Standard Products Arrangements were introduced in the WA market in 2014 with a similar aim to create a pseudo-generator offering simple products to support new market entrants. However, these arrangements have been ineffective in fostering competition because:

- The products are not competitively priced. In its review of the Standard Products Arrangements in 2015 the Economic Regulatory Authority of WA found that the

² Ireland’s Single Energy Market (“SEM”) operates as a gross settlement pool, similar to the NEM. As such, Directed Contracts are financial products to hedge gross pool prices.

³ The HHI is a measure of supplier concentration in a market and is calculated by summing the squares of the market share of each supplier in the market. HHI measures are between zero and 10,000. Where an HHI is greater than 2,000, the market is considered to be highly concentrated. For example, the HHI for the WA contestable market is over 5,000.

⁴ The dependent variable in the regression formula is the Directed Contract strike price while the independent variables are the forward fuel and carbon prices.

implementation of the arrangements had been ineffective due to the high buy-sell price spread.

- The volume of energy offered under the Standard Products Arrangements is very small. Synergy is required to offer 150MW of energy, however this is less than five per cent of its wholesale procurement portfolio. By contrast, the volume of Directed Contracts offered by ESB in Q4 2016 was approximately 10 per cent of its installed generation capacity.

The introduction of a larger range of competitively priced wholesale mechanisms would support greater retail competition in WA.

Development of competition in the residential electricity market

After the residential electricity market was opened to competition in 2005, it took six years for the market to satisfy the criteria for full price deregulation, which occurred in April 2011. Despite competition in the C&I market segment and a number of suppliers offering products to SME customers, there were no new entrants into the residential electricity market until late 2008 when Airtricity entered the market. Bord Gais Energy (“BGE”), Ireland’s SOE gas retailer, entered the market in early 2009.

The following table summarises the key events in the development of competition in the market, the number of suppliers, independent supplier market share and measures of market concentration.

	<i>19 February 2005</i>	<i>Late 2008</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Current</i>
Key event	Retail market open to entrants	First independent retailer enters	SME price deregulated	Residential price deregulated	First comparison site introduced	
Retailers (residential)	Electric Ireland	Electric Ireland Airtricity	Electric Ireland Airtricity Bord Gais Energy	Electric Ireland Airtricity Bord Gais Energy	Electric Ireland Airtricity Bord Gais Energy PrePayPower	Electric Ireland Airtricity Bord Gais Energy PrePayPower Pinery Energia Panda Power
Independent retailer market share	0%	0%	~20%	~40%	~40%	~47%
Market share of top 3	100%	100%	100%	100%	99%	90%
Market concentration index (HHI)	10,000	10,000	4,448	4,151	4,319	3,634
Comparison websites	0	0	0	0	1	2

Source: Commission for Energy Regulation

Note: HHI greater than 2,000 indicative of a highly concentrated market.

Airtricity and BGE gained significant market share after entering the market in 2009, reaching a combined market share of approximately 40 per cent by the time electricity prices were fully deregulated in 2011.

The ability for these new entrants to gain market share was driven by their ability to offer dual fuel products and offering discounts on each fuel. According to Electric Ireland, more than 700,000 customers (35 per cent of the domestic market) switched away from the incumbent retailer during this period.

Following full price deregulation (Q2-11 in the chart below), the restriction on Electric Ireland supplying residential gas was lifted and it commenced offering discounted dual fuel products. As a result, the independent suppliers in the market have not been able to make any significant inroads into Electric Ireland’s market share since this time.

More recently, smaller retailers have been able to enter the market and gain market share, primarily at the expense of BGE.

Domestic electricity market share by consumption

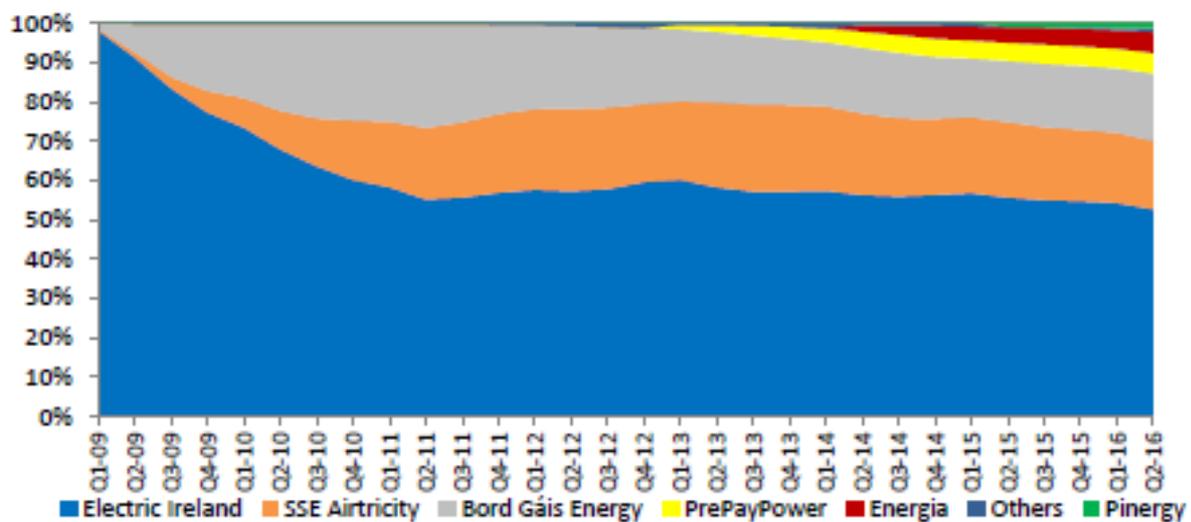


Figure 2.2, Domestic electricity trend in market share by consumption

Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017.

Customer outcomes

As new suppliers have entered the market, product innovation and customer choice has increased with a number of new product features available including price discounts, payment methods, cashback offers and loyalty programs, energy based services, contract terms and rate structures.

The following table summarises the product features currently available in the market.

Product and service offerings

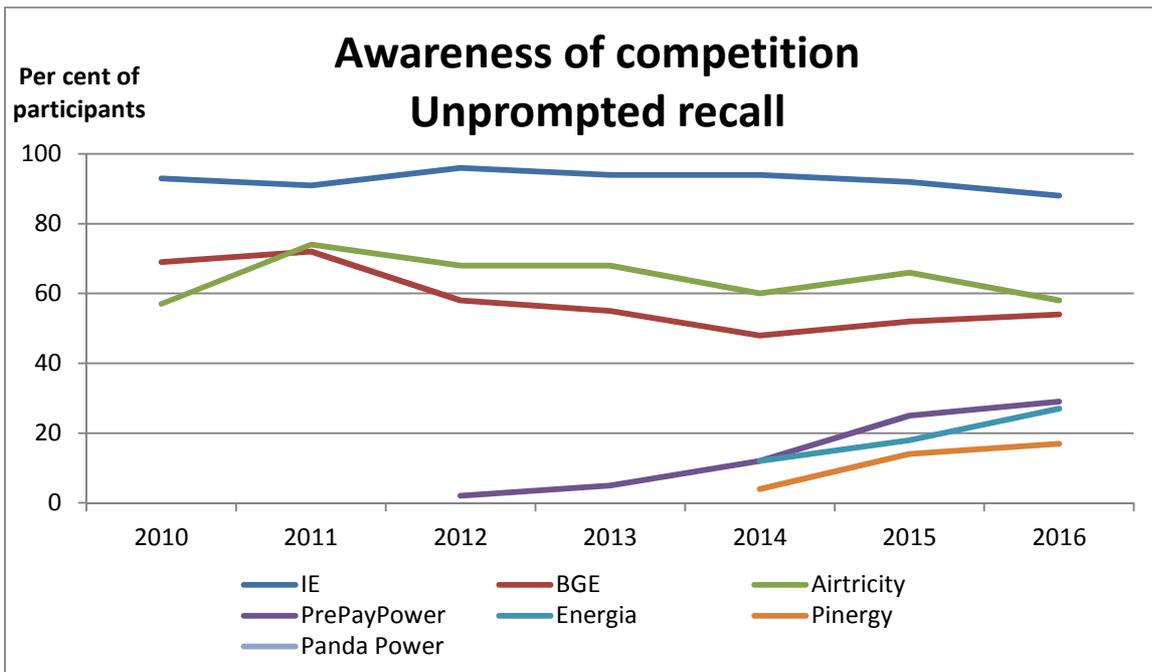
Energy based services/Free items	Cashback offers & Points	Discounts	Payment Methods	Contract terms	Rates	Dual Fuel
Climote heating control	€50-€120 cashback	2%-20% Gas discounts	PAYG	12 months	Fixed Rates	Discounts off each fuel or weighted towards one fuel
Nest learning thermostat	1000-4000 Tesco clubcard points	1%-26% Electricity discounts	Direct Debit	24 months	Variable Rates	Combinations of single fuel offerings in terms of cashback offers and points
GE Led Light Bulbs	€20-€50 free top ups	Dual fuel discount bundles	Bank Transfer	Rolling contracts/no contract term	24 hour plans	
In Home Displays and applications	Access to loyalty schemes		Phone	€50-€100 exit fees	Day/Night plans Level pay	
Boiler Services			Cheque			
Green offers			An Post			
Ireland Jerseys			Credit Union			

Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017.

Note: Climote is the brand of the climate control device offered by Electric Ireland.

Other customer outcomes of note include:

- The level of awareness of competition and competitors in the market has increased as shown in the chart below, meanings consumers are more informed and likely to seek value by engaging with the market;
- The process of switching retailers has been streamlined, with between 80 and 90 per cent of respondents finding the switching process either easy or very easy between 2012 and 2016;
- The number of customers engaging in alternative payment arrangements (direct debit, bill smoothing, etc.) has increased from 15 per cent in 2013 to 26 per cent in 2016; and
- Levels of customer satisfaction have been maintained with between 80 and 88 per cent of respondent stating they were satisfied with their electricity supplier between 2010 and 2015.

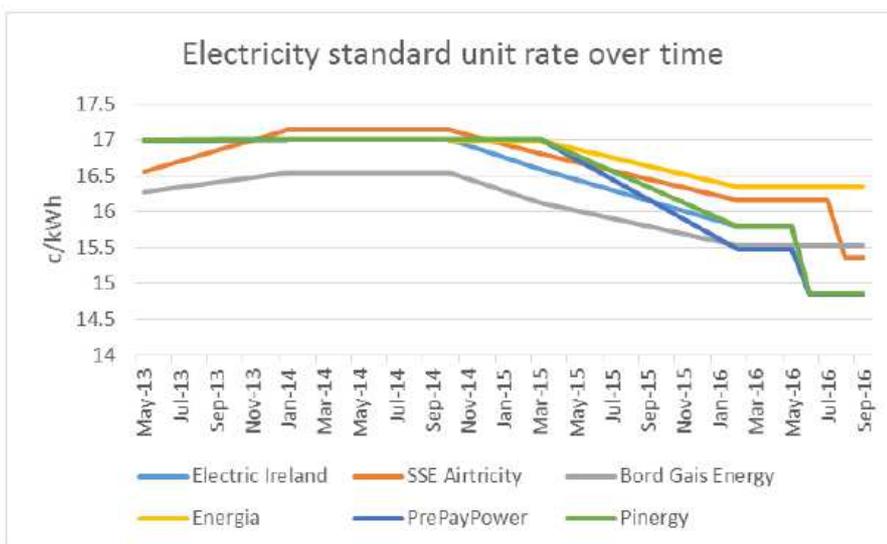


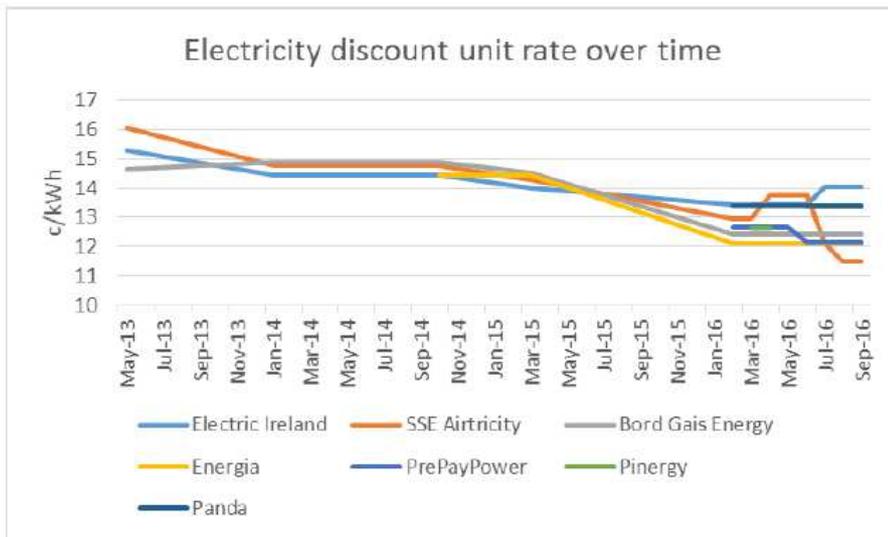
Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017.

Retail prices and discounts

Price competition in the retail electricity market is primarily based on discounts to the usage charges, with some differentiation on standing charges.

Over time, competition in the market has contributed to lower usage charges as seen in the following charts which show the standard and discounted usage rates available in the market between May 2013 and September 2016.





Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017.

Discounted rates are offered primarily to new customers on 12 or 24 month contracts and are typically between 10 and 20 per cent. However some retailers offer lower discounts to existing customers for using direct debit, e-billing and other product features. The following chart shows a breakdown of the discounts in the market.

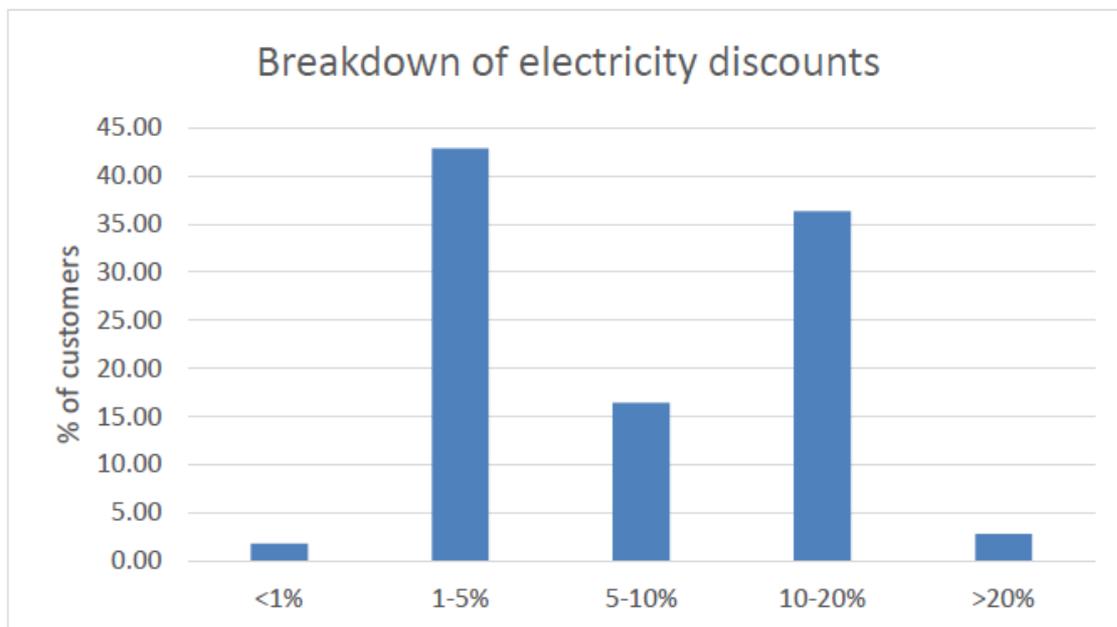


Figure 5.17, Breakdown of electricity discounts from reporting of top 10 plans

Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017.

While competition has contributed to lower electricity prices in Ireland, the spread between wholesale electricity and network charges and retail electricity prices increased between 2013 and 2016. The driver of higher margins in the market is currently unclear, however the Energy Regulator suspects that higher retailer operating costs (particularly promotions and advertising costs) have contributed to the higher spread (Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017).

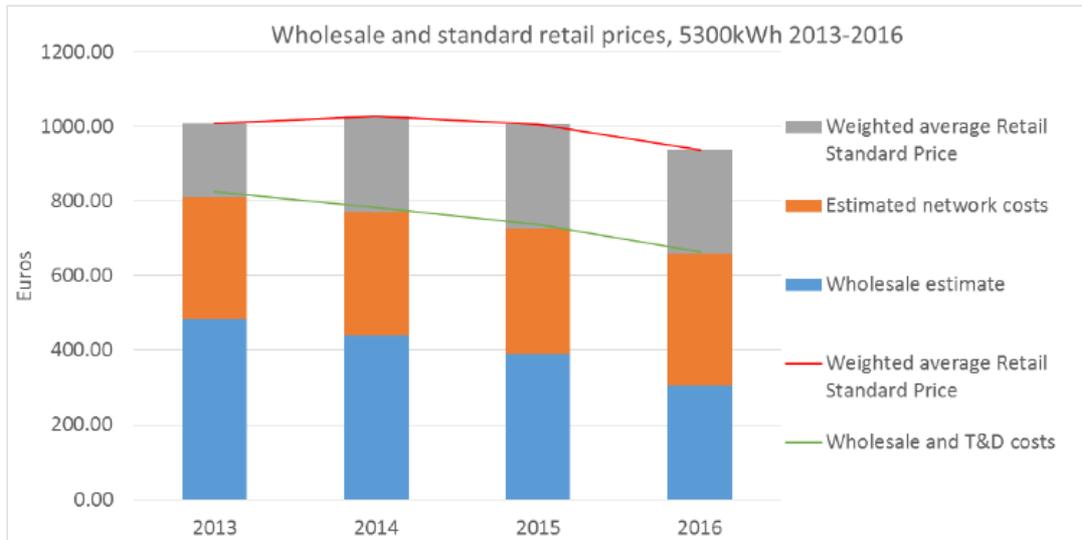
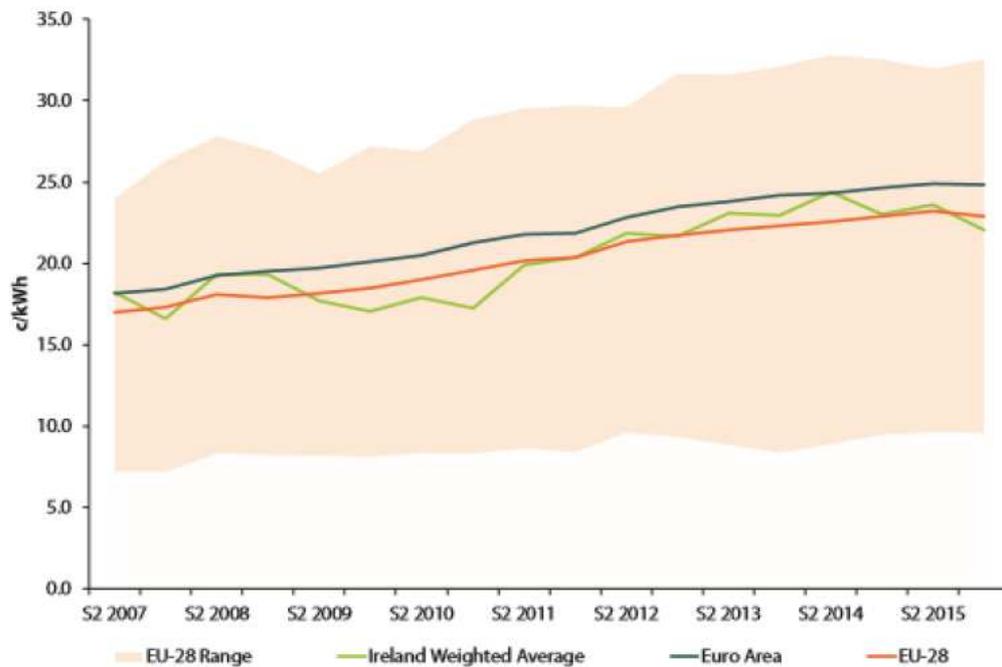


Figure 5.5, Electricity Wholesale and Standard Retail Prices

Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017.

Comparison to European electricity prices

Since Airtricity entered the residential electricity market in late 2008, residential weighted average electricity prices have tracked prices in other competitive markets in Europe, as shown in the following chart.



Source: SEAI based on Eurostat data

Figure 5.1, Average Electricity Prices (ex-VAT) to Households – All Consumption Bands (from SEAI’s Electricity and Gas Prices in Ireland report, 1st Semester 2016)

Source: Commission for Energy Regulation – Review of Competition in the Electricity and Gas Retail Markets, 2017.

Impact on ESB CS / Electric Ireland

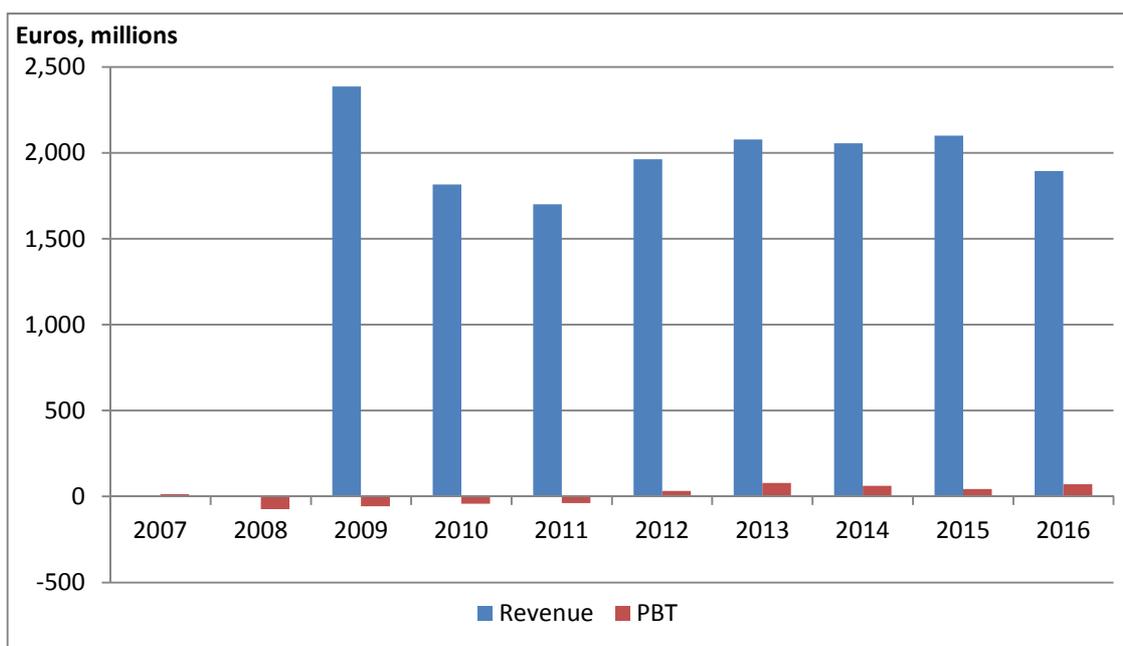
Electric Ireland has steadily improved the profitability of its business, which was impacted by the GFC in 2008, since the introduction of competition. Electric Ireland's revenue decreased significantly between 2009 and 2011 as a result of the GFC and its declining market share.

In response to its changing market, Electric Ireland undertook a restructuring program between 2008 and 2010 which, along with the required rebranding of the ESB CS business, repositioned the business for the fully competitive market.

Electric Ireland also focused its business on delivering value to customers through:

- Competitively priced single and dual fuel offers;
- Energy efficiency products and services;
- More flexible payment arrangements;
- Digital platform development; and
- New customer loyalty programs and benefits.

As a result of these initiatives, Electric Ireland returned its business to profitability in 2012 and has delivered an average profit before tax ("PBT") margins of 2.8 per cent over the past five years.



Source: Company annual reports.

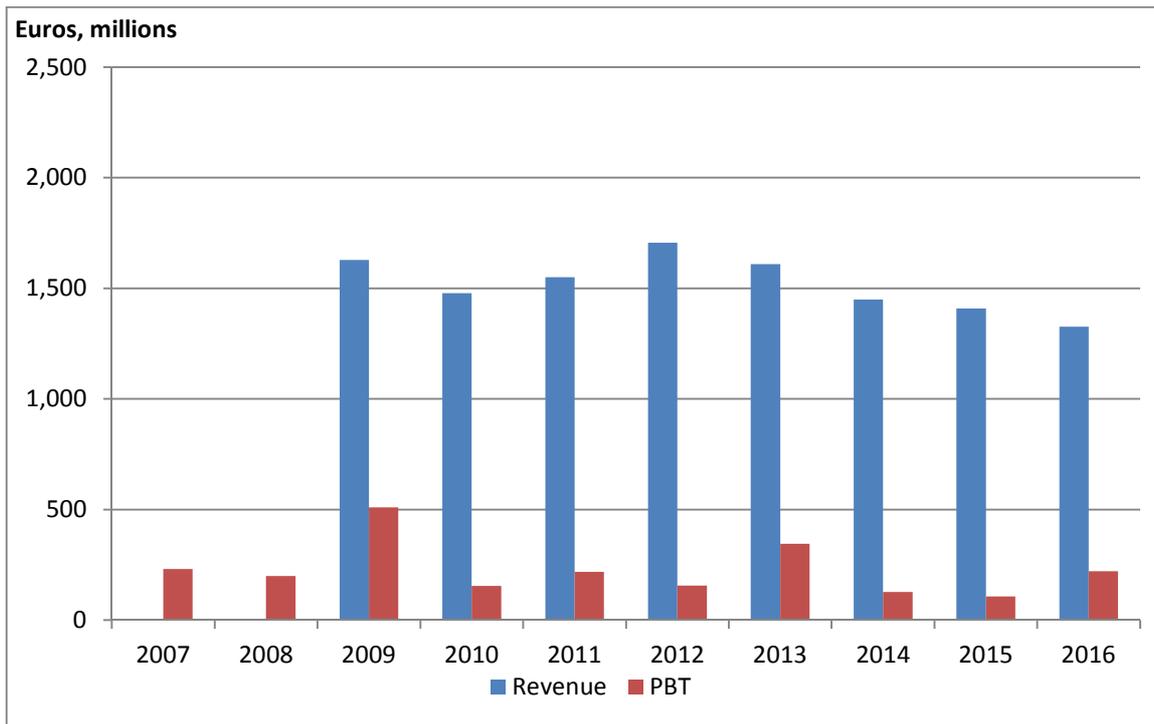
Note: Segment revenue was not disclosed in 2007 and 2008.

Impact on ESB Generation and Wholesale (ESB GW)

The financial performance of ESB GW has been largely unaffected by the changes imposed by the Energy Regulator as shown in the chart below. The primary drivers of ESB GW's performance over the past five years were:

- Declining wholesale energy and capacity prices between 2012 and 2016 reducing revenue;
- Asset impairments in 2014 and 2015; and

- Stronger asset utilisation in 2016.



Source: Company annual reports.

Note: Segment revenue was not disclosed in 2007 and 2008.

Conclusion

Kleenheat's detailed review of the Ireland retail electricity market deregulation process undertaken by the Energy Regulator has shown that positive steps have been taken to promote effective competition in the electricity market and that the WA Government could consider similar steps when introducing FRC in WA to reduce the barriers to effective competition in the electricity market.